Oklahoma State University Institute of Technology
Online Common Syllabus
Summer 2018

ITD1223 Network Systems

Students examine network concepts, standards, technologies, media, protocols and topologies. Topics include connectivity, network devices, basic security, local and wide area networks, network design, transmission media, structured cabling, IP addressing and Open System Interface (OSI) model.

Course Purpose:
This course focuses on the requirements and knowledge needed to successfully complete the Cisco CCENT (ICND1) certification exam.

Type of course: Theory/Lab.
Credit Hours: 3; Total hours of theory per semester: 30;
Total hours of lab for the semester: 45; Total hours of clinical per semester: 0.
Class length - Full Semester
Class format - Fully Online
Required synchronous meetings: None
Prerequisites: ITD1213 – Hardware Systems.

Instructor Name: Dr. Fil Guinn **Instructor Phone:** (918) 293-5428
Office: EET/IT, Room 15C **Instructor email:** fil.guinn@okstate.edu
Contact: My preferred method of contact is **email**. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours: Tuesday and Wednesday 6:30 – 8:30 PM, Tuesday & Thursday 10:00 AM – 3:00 PM, (Online, Phone and Email) Central Time

School Name: Information Technologies **School's Main Phone:** 918-293-5440

Required Text, References, and Materials

Texts: Cisco CCENT/CCNA ICND1 100-105 Official Cert Guide and Simulator Library, Wendell Odom, ciscopress.com, ISBN 9781587206757
References: Assorted Subject Videos
Materials: Access to a computer with broadband Internet Access (2Mbps upload preferred)
Uniform/Tools: None
Estimated Cost for Materials: $ 150.00
Estimated Cost for Uniform/Tools: $ None

Optional Resources: Assorted YouTube videos

Upon completion of the course, students should:

Course Objectives	Assessment of Objectives	
Apply mathematical concepts to meet Information Technology requirements	Simulated network labs (Ch 13-16) *Course Project	A.4
Design, implement, manage, or maintain scalable networks using enterprise level, physical and virtual, network classifications, topologies, or communication models	*Course Project	C.2
communicate in a professional manner in both IT technical and non-technical presentations in live and/or recorded formats	Protocol Presentation	F.2
List the applicable certification paths related to the different career choices in the information technology domain	Discussion Questions	H.1
evaluate the impacts and consequences of professional development activities through reflective assessment or supervisory interaction	Professional Development Activity	H 2
Conduct network maintenance, diagnostics, or testing	Simulated network labs	J.1
troubleshoot PC or network hardware issues or software errors based on scenarios to the resolution of the issue	Module 4 network labs	M.1
Demonstrate knowledge of industry standard network classifications, topologies or network communication models	*Course Project	M.2

Aspects of the course objective assessments may be used in the university's assessment of student learning. If applicable, an asterisk (*) above indicates this course is used in the university assessment program.

COURSE ACTIVITIES

In this course students will:

- Participate in online discussions and activities
- Use the simulation software to complete labs
- Reply to chapter questions and definitions
- View course specific video presentation
- Complete a research project
- Participate in an individual presentation
- Compile a portfolio of work produced

EVALUATION - GRADES WILL BE BASED ON THE QUALITY AND COMPLETION OF THESE TASKS:

Discussions	10%
Faculty Contact	5%
Simulation Labs	30%
Chapter Questions	30%
*Course Project	10%
*Presentation	10%
Portfolio	5%
Total	100%

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Grading Scale

A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% & below

*The student's grade for this assignment will be used in the university's assessment of student learning. A 70% competency or higher receives a Pass rating. This Pass/Fail rating is independent of the student's course grade.

Daily and/or weekly quizzes, small weekly assignments and similar type projects: Normal return time to student by next class meeting or no later than one (1) week.

Extensive assignments, large lab projects, extensive quizzes, exams and similar type projects: Normal return time to students in one (1) to two (2) weeks.

RECOMMENDED STUDENT COMPETENCIES/SKILLS

Recommended student skills needed for success are the following:

- Ability to read and follow step by step instructions within the course site
- Ability you complete all required assignments within the allotted time
- Ability to research related topics and use MLA formatted in-text citations
- Ability to build a MLA formatted Work Cited page for all research cited

AUTHORIZED TOOLS

Students may use any/all course materials, including books and notes, while participating in online classroom activities. All quizzes, labs, and written assignments are to be completed independently and any instance of collaboration will be considered academic dishonesty. Collaboration with classmates while studying concepts and network configurations is permitted and encouraged.

Late Work

Turning in your properly-executed work early is always acceptable. All exams, assignments, papers and projects must be completed and submitted by the specified due date; late work will not be accepted after the due date unless prior authorization is given.

If the faculty member grades an assignment you have submitted before the due date, you do not have the ability to modify the assignment to increase your grade. Any additional submissions will not be opened, so make sure you are ready to submit your assignments and accept the grade you are given.

Testing
Quizzes may be timed or proctored during this course.

OTHER LAB AND CLASSROOM POLICIES
N/A

ONLINE COURSE INTERACTION
OSUIT requires all online courses to include interaction between students, peers and instructors. Our online courses use a variety of tools to build a community of learners and strengthen engagement between students and their peers, as well as between students and the instructor. Communication tools used in courses may include Discussion, News, and Email. Read the syllabus completely to determine which of these methods you, your classmates and your instructor will use for interaction. General guidelines for student conduct while interacting within an online course include: (1) Use proper language in all communications; (2) Harassment of any type will not be tolerated; (3) No jokes, insults or threats of an offensive nature.
For more information, go to: http://osuit.edu/center/netiquette

SYLLABUS ATTACHMENT
View the Syllabus Attachment, which contains other important information, by visiting http://osuit.edu/center/student_syllabus_information

Course Schedule

Schedule	Topic	Assignment	Due Date
Week 1	**Module 1** Introduction to TCP/IP Networking	Chapter 1 end of chapter questions and Module 1 schedule activity, Discussion Board responses	**5/6/2018**
Week 2	**Module 2** Fundamentals of Ethernet LANs and Fundamentals of WANs	Chapter 2 & 3 end of chapter questions and Module 2 schedule activity, Discussion Board responses	**5/13/2018**
Week 3	**Module 3** Fundamentals of IPv4 Addressing and Routing Plus Fundamentals of TCP/IP Transport and Applications	Chapter 4 & 5 end of chapter questions and Module 3 assessment activity, Faculty contact	**5/20/2018**
Week 4	**Module 4** Using the Command-Line Interface and Analyzing Ethernet LAN Switching	Chapter 6 & 7 network simulator labs. Chapter 6 & 7 end of chapter questions, Discussion Board responses	**5/27/2018**
Week 5	**Module 5** Configuring Basic Switch Management and Configuring Switch Interfaces	Chapter 8 & 9 network simulator labs. Chapter 8 & 9 end of chapter questions and Discussion Board responses	**6/3/2018**
Week 6	**Module 6** Analyzing Ethernet LAN Designs and Implementing Ethernet Virtual LANs	Chapter 10 & 11 network simulator labs. Chapter 110 & 11 end of chapter questions, Faculty contact	**6/10/2018**
Week 7	**Module 7** Troubleshooting Ethernet LANs	Chapter 12 network simulator labs. Chapter 12 end of chapter questions and Discussion Board responses	**6/17/2018**
Week 8	**Module 8** Perspectives on IPv4 Subnetting & Analyzing Classful IPv4 Networks	Chapter 13 & 14 network simulator labs. Chapter 13 &14 end of chapter questions and Discussion Board responses	**6/24/2018**
Week 9	**Module 9** Analyzing Subnet Masks	Chapter 15 network simulator labs. Chapter 15 end of chapter questions and Faculty contact	**7/15/2018**
Week 10	**Module 10** Analyzing Existing Subnets	Chapter 16 network simulator labs. Chapter 16 end of chapter questions and Discussion Board responses.	**7/22/2018**
Week 11	**Module 11** Operating Cisco Routers	Chapter 17 network simulator labs. Chapter 17 end of chapter questions, Discussion Board responses **Course Project Phase 1**	**7/29/2018**

Week 12	**Module 12** Configuring IPv4 Addresses and Static Routes	Chapter 18 network simulator labs. Chapter 18 end of chapter questions.	**8/5/2018**
Week 13	**Module 13** Learning IPv4 Routes with RIPv2	Chapter 19 network simulator labs. Chapter 19 end of chapter questions **Course Project Phase 2**	**8/12/2018**
Week 14	**Module 14** DHCP and IP Networking on Hosts	Chapter 20 network simulator labs. Chapter 20 end of chapter questions	**8/19/2018**
Week 15	**Module 15** Presentation & Portfolio	**Protocol Presentation Video** **Portfolio**	**8/21/2018** **8/23/2018**

Schedule is subject to change at instructor discretion.